

Name: _____

Glossary

Science 5th Grade

suān

酸 **Acid** is a substance that when combined with a base can form a salt. (p23)

qì tuán

气团 (氣團) **Air mass** is a large body of air with similar properties all through it. (p218)

qì nāng

气囊 (氣囊) **Air Sacs** is the thin-walled sacs in the lungs where oxygen enters the blood and carbon dioxide leaves the blood. (p132)

hé jīn

合金 **Alloy** is a metal made by mixing two or more metallic elements. (p19)

hǎi bá

海拔 **Altitude** is the height above Earth's surface. (p193)

fēng sù biǎo yí

风速表/仪 (風速表/儀) **Anemometer** is a tool that measures wind speed. (p233)

shuǐ dào

shū shuǐ guǎn dào

水道/输水管道 (輸水管道) **Aqueduct** is a system of pipelines that carries water from a river or lake to the area where it is needed. (p183)

hán shuǐ céng

含水层 (含水層) **Aquifer** is the layer of rock and soil that groundwater flows through. (p177)

xù liè

序列 **Array** is an arrangement like a grid. (p13)

动脉 (動脈) **Artery** is a blood vessel that carries blood away from the heart to other parts of the body. (p128)

小行星 **Asteroid** is a rocky object up to several hundred kilometers wide that revolves around the Sun. (p128)

大气层 (大氣層) **Atmosphere** is all of the air around Earth. (p211)

气压 (氣壓) **Atmospheric pressure** is the weight of air pushing down on an area. (p211)

原子 **Atom** is the smallest particle of an element with the same properties of the element. (p12)

原子序数 (原子序數) **Atomic number** is the number of protons in the nucleus of an atom; the single most important property of an element. (p12)

心房 **Atrium** is the upper part of each side of the heart; plural atria. (p130)

B

天平秤, 平衡 **Balance** is a tool used to measure mass. (p10)

气压计 (氣壓計) **Barometer** is a tool that measures air pressure. (p232)

碱 (鹼) **Base** is a substance that when combined with an acid can form a salt. (p23)

páng guāng

膀胱 **Bladder** is the sac that collects and stores urine formed by the kidneys. (p140)

xiě guǎn

血管 **Blood vessels** are the tube in which blood flows throughout the body. (p127)

fèi diǎn

沸点 (沸點) **Boiling point** is the temperature at which a liquid becomes a gas. (p52)

cūi de

脆的 **Brittle** breaks easily. (p15)

zhī qì guǎn

支气管 (支氣管) **Bronchi** are the two tubes that lead from the trachea to the lungs; singular bronchus. (p132)

xiǎo zhī qì guǎn

小支气管 (小支氣管) **Bronchiole** is a small tube in the lungs that carries air to air sacs. (132)

C

wēi xiě guǎn

微血管 **Capillary** is the smallest kind of blood vessels. (p128)

xì bāo

细胞 (細胞) **Cell** is the basic building block of living things. (p95)

xì bāo bì

细胞壁 (細胞壁) **Cell wall** is a rigid structure surrounding a plant cell membrane that gives the cell support. (p97)

xì bāo hū xī zuò yòng

细(細)胞呼吸作用 **Cellular respiration** is the process by which cells break down sugar and oxygen to release energy, water, and carbon dioxide. (p110)

化学变化 (化學變化) **Chemical change** is a change in which one kind of matter changes into a different kind of matter which different properties. (p45)

化学反应方程式 (化學反應方程式)

Chemical equation is a statement of chemical symbols that shows what happens during a chemical reaction. (P54)

化学性质 (化學性質) **Chemical property** is any one or more substances change into other substances with different chemical properties. (p11)

化学反应 (化學反應) **Chemical reaction** is when one or more substances change into other substances with different chemical properties. (p45)

叶绿素 (葉綠素) **Chlorophyll** is a green substance that allows plants to make their own food. (p108)

叶绿体 (葉綠體) **Chloroplast** is a structure in plant cells that stores chlorophyll. (p108)

循环系统 (循環系統) **Circulatory system** is the system of the body that transports nutrients and oxygen to cells and carries away cell wastes. (p127)

分类 (分類) **Classify** is to arrange or sort objects, events, or living things according to their properties. (p80)

寒流 **Cold front** is the boundary between two air masses where the cold air mass is moving into the area. (220)

shōu jí zī liào
收集资(資)料 **Collect data** is to gather observations and measurements into graphs, tables, charts, or labeled diagrams. (p76)

jié cháng
结肠 (結腸) **Colon** is part of the digestive system that stores undigested food until it can be removed from the body. (p138)

huà hé fǎn yīng
化合反应 (應) **Combination reaction** is a chemical reaction in which reactants come together to form new products. (p56)

huì xīng
彗星 **Comet** is a frozen mass of ice and dust with a tail up to 80 million kilometers long that is in orbit around the Sun. (p271)

chuán dá gōu tōng
传达 (傳達) 沟通 (溝通) **Communicate** is to use words, pictures, graphs, tables, charts, and labeled diagrams to share information. (p79)

huà hé wù
化合物 **Compound** is a kind of matter made of a chemical combination of two or more elements. (p20)

jié lùn
结论 (結論) **Conclusion** is a decision reached after thinking about facts and details. (p43)

níng jié
凝结 (結) **Condensation** is the process by which particles leave a gas and become a liquid. (p189)

dǎo rè diàn
导热/电 (導熱/電) **Conduct** is to let heat and electricity pass through. (p11)

节约 (節約) **Conservation** is the process of using a resource wisely so that it lasts longer. (p184)

控制变(變)量 **Controlled variable** is a variable that must not be changed in an experiment to have a fair test. (p77)

空气对流 (空氣對流) **Convection current** is the rising and sinking of matter in a circular pattern caused by temperature differences. (p214)

结晶体 (結晶體) **Crystal** is a group of particles arranged in a regular pattern with flat sides. (p22)

龙卷风 (龍捲風) / 气旋 (氣旋) **Cyclone** is a wind that spirals inward around an area of low pressure. (p222)

D

分解反应 (應) **Decomposition reaction** is a chemical reaction in which reactants split apart to form products. (p56)

因变(變)量 **Dependent variable** is something you measure or observe in an experiment. (p77)

详细资料 (詳細資料) **Details** are individual pieces of information that support a main idea. (p171)

露水 / 露珠 **Dew** is water vapor that condenses on cold surfaces during the night. (p189)

橫隔膜 gē mó **Diaphragm** is the muscle below your lungs that contracts to let air into the lungs and relaxes to push air out of them. (p132)

消化 xiāo huà **Digestion** is the process that changes food into a form that the body can use. (p136)

消化系統(統) xiāo huà xì tǒng **Digestive system** is the system of the body that takes in food and breaks it down into a form cells can use. (p136)

溶解 róng jiě **Dissolve** is to spread throughout a liquid. (p23)

延展性 yán zhǎn xìng **Ductile** is able to be made into wires or hammered into sheets. (p18)

小行星 xiǎo xíng xīng **Dwarf** planet is small, round object that orbits the Sun. (p276)

E

聖嬰現象(聖嬰現象) shèng yīng xiàn xiàng **EL Nino** is a cycle of changes in the surface temperature of the Pacific Ocean that brings especially wet and dry seasons to many places in the world. (p248)

電子(電子) diàn zǐ **Electron** is the particle in an atom that has a negative charge. (p12)

元素 yuán sù **Element** is one of more than 100 basic kinds of matter that cannot be broken into smaller pieces through physical or chemical processes. (p9)

橢圓形軌道(橢圓形軌道) tuō yuán xíng guī dào **Ellipse** is a shape like an oval. (p260)

赤道 (chì dào) **Equator** is the imaginary line that separates the northern and southern halves of Earth. (p216)

食道 (shí dào) **Esophagus** is the tube that carries food from the mouth to the stomach. (p136)

估计 (gū jì) **Estimate** and measure are to tell what you think an object's measurements are and then measure it in units. (p154)

蒸发 (zhēng fā) **Evaporation** is the process by which particles leave a liquid and become a gas. (p52)

排泄系统 (pái xiè xì tǒng) **Excretory system** is the system of the body that removes waste. (p101)

实验研究 (shí yàn yán jiū) **Experiment** is to use scientific methods to test a hypothesis. (p76)

探索 (tàn suǒ) **Explore** is to study a scientific idea in a hands-on manner. (p6)

F

雾 (wù) **Fog** is a cloud at ground level. (p193)

天气预报 (tiān qì yù bào) **Forecast** is a predication of what may happen in the future based on past patterns. (p232)

锋面 (fēng miàn)* **Front** is a boundary between two air masses. (p220)

结霜 (結霜) ^{jié shuāng} **Frost** is water vapor that deposits as ice crystals on surfaces at temperatures below freezing. (p189)

G

一般化 ^{yī bān huà} **Generalization** is an inference that applies that outcome of one situation to other situations. (p93)

冰川 ^{bīng chuān} **Glacier** is a long stretch of ice that flows slowly downhill or spreads over a land area. (p179)

葡萄糖 ^{pú táo táng} **Glucose** is a substance made during photosynthesis and used during cellular respiration; a type of sugar. (104)

地下水 ^{dì xià shuǐ} **Groundwater** is rain or melted snow that seeps into the ground. (p177)

H

冰雹 ^{bīng báo} **Hail** is frozen rain that is repeatedly blown upward into a cloud gaining layers of ice until it is so heavy it falls to the Earth. (p194)

心腔室 ^{xīn qiāng shì} **Heart chambers** are the parts of the heart. (p130)

湿度 (濕度) ^{shī dù} **Humidity** is the amount of water in the air. (p194)

飓风 (颶風) ^{jù fēng} **Hurricane** is a dangerous cyclonic storm made up of swirling bands of thunderstorms with wind speeds of at least 119km per hour that forms over warm ocean water. (p228)

水循环 (環) ^{shuǐ xún huán} **Hydrologic cycle** is the repeated movement of water through the environment in different forms; also called the water cycle. (p188)

水圈 ^{shuǐ quān} **Hydrosphere** is all of the waters of the Earth. (p173)

假设 (假設) ^{jiǎ shè} **Hypothesis** is a statement of one possible way to solve a problem or answer a question. (p76)

I

识别和控制变量 (識別和控制變量) ^{shí bié hé kòng zhì biàn liáng} **Identify and control variables** are to change one thing, but keep all the other factors the same. (p76)

自变(變)量 ^{zì biàn liáng} **Independent variable** is something you change in an experiment. (p78)

由此推断(斷) ^{yóu cǐ tuī duàn} **Infer** is to draw a conclusion or make a reasonable guess based on what you have learned or what you know. (p7)

推理, 推论(論) ^{tuī lǐ tuī lùn} **Inference** is a conclusion based on facts, experiences, observations, or knowledge. (p7)

数据解读 (數據解讀) **Interpret data** is to use the information you have collected to solve problems or answer questions. (p79)

调(調)查 **Investigate** is to solve a problem or answer a question by following an existing procedure or an original one. (p32)

K

肾 (腎) **Kidney** is one of a pair of organs that removes waste from the blood. (p140)

L

大肠 (腸) **Large intestine** is a wider tube connected to the small intestine that removes water from undigested food and stores this waste until it is removed from the body. (p138)

纬(緯)度 **Latitude** is a measure of how far a place is north or south of the equator. (p216)

闪电 (閃電) **Lightning** is a large electrical spark moving between areas of opposite charge. (p225)

肺 **Lungs** are an organ of the respiratory system that contains bronchioles and air sacs. (p132)

M

大意 **Main idea** is the most important idea in a passage. (p171)

可锻铸, 玛钢 (可鍛鑄, 瑪鋼) **Malleable** can be bent and shaped without breaking. (p 18)

质(質)量 **Mass** is a measure of the amount of matter in an object. (p10)

金属(屬) **Metal** is an element or combination of elements that are usually shiny can be bent and shaped without breaking, can be made into wire, and conduct heat and electricity. (p15)

半金属(屬) **Metalloid** is an element that has some properties of both metals and nonmetals; also called semimetal. (p15)

气象学家 (氣象學家) **Meteorologist** is a scientist who uses weather data to forecast the weather. (p235)

线粒体 (線粒體) **Mitochondria** are the parts of a cell where sugar is broken down to release energy in a process called cellular respiration; singular mitochondrion. (p96)

混合物 **Mixture** is two or more substances combined while keeping their own properties. (p26)

模型 **Model** is a sketch, diagram, or object that represents something else. (p198)

分子 **Molecule** is the smallest part of a substance made from more than one atom that still has the properties of the substance. (p13)

季风(風) **Monsoon** is a wind that changes direction with the seasons. (p230)

粘(黏)液 **Mucus** is a sticky, thick fluid which coats parts of the respiratory system trapping dust and germs. (p132)

多细(細)胞 **Multicellular** is having many cells. (p95)

N

中子 **Neutron** is the particle in an atom that has no charge. (p12)

非金属(屬) **Nonmetal** is an element that is usually brittle, does not conduct heat or electricity well, and cannot be made into wires or hammered into sheets. (p15)

原子核, 细(細)胞核 **Nucleus** is (1) the center of an atom (2) the central part of a cell that directs the cell's activities and stores information to pass on to new cells (p96) (3) a mass of dust and frozen water and gases at the center of a comet. (p270)

O

观(觀)察 **Observe** is to use your senses to find out about objects, events, or living things. (p42)

器官 **Organ** is a group of different tissues that join together to form one structure. (p98)

器官系统(統) **Organ system** is group of organs and tissues that work together to carry out a life process. (p99)

P

yuán sù zhōu zhōu qī biǎo
元素周(週)期表 **Periodic table of elements** is a table containing all the elements organized by atomic number and chemical properties. (p14)

rèn pí bù
韧(韌)皮部 **Phloem** is tubes that carry sugar from a plant's leaves to the rest of the plant. (p103)

guāng hé zuò yòng
光合作用 **Photosynthesis** is the process by which plants use water, carbon dioxide, and energy from sunlight to produce oxygen and sugar. (p108)

wù lǐ biàn huà
物理变(變)化 **Physical change** is a change in which matter keeps the same chemical properties; a change in size, shape, volume or state of matter. (p45)

wù lǐ xìng zhì
物理性质(質) **Physical property** is any property of a material that can be seen or measured without changing the material. (p10)

xíng xīng
行星 **Planet** is a large, round object that orbits the Sun and has cleared the neighborhood round its orbit. (p261)

jí dì dì qū
极地地区 (極地地區) **Polar region** is area near the North or South Pole that is very cold. (p217)

jiàng shuǐ liáng
降水量 **Precipitation** is water that falls from clouds as rain, hail, sheet, or snow. (p189)

chǎn wù
产(產)物 **Product** is a substance made by a chemical reaction. (p54)

质(質)子 ^{zhì} ^{zì} **Proton** is the particle in an atom that has a positive charge. (p12)

R

雷达(達) ^{léi} ^{dá} **Radar** is a technology used to collect weather data. (p233)

量雨器 ^{liáng} ^{yǔ} ^{qì} **Rain gauge** is a tool that measures the amount of rain that has fallen. (p233)

反应(應)物 ^{fǎn} ^{yīng} ^{wù} **Reactant** is a substance used in a chemical reaction. (p54)

废水处理 (廢水處理) ^{fèi} ^{shuǐ} ^{chǔ} ^{lǐ} **Reclamation** is when wastewater from homes or business is treated and used again for purposes other than drinking. (p185)

回收 ^{huí} ^{shōu} **Recycle** is to treat something so that it can be used again. (p176)

置换(換)反应(應) ^{zhì} ^{huàn} ^{fǎn} ^{yīng} **Replacement reaction** is a chemical reaction in which the parts of one or more reactants switch places. (p57)

呼吸系统(統) ^{hū} ^{xī} ^{xì} ^{tōng} **Respiratory system** is the system of the body that takes in oxygen and removes carbon dioxide. (p132)

径(徑)流 ^{jīng} ^{liú} **Runoff** is water moving downhill. (p182)

S

含盐(鹽)量 ^{hán} ^{yán} ^{liáng} **Salinity** is a measure of the amount of salt in water. (p174)

盐(鹽) ^{yán} **Salt** is a compound formed by a chemical reaction between an acid and a base; often refers to sodium chloride. (p22)

卫(衛)星 ^{wèi xīng} **Satellite** is an object that orbits another object in space. (p262)

科学(學)方法 ^{kē xué fāng fǎ} **Scientific method** is organized ways of finding answers and solving problems. (p76)

海平面 ^{hǎi píng miàn} **Sea level** is the level of the surface of an ocean. (p173)

严重雷暴预警 (嚴重雷暴預警) ^{yán zhòng léi bào yù jǐng} **Severe thunderstorm warning** is a message sent out to an area where severe thunderstorms *have formed* letting people know that they should get inside as soon as possible. (p225)

严重雷暴观测 (嚴重雷暴觀測) ^{yán zhòng léi bào guān cè} **Severe thunderstorm watch** is a message sent out to an area where severe thunderstorms with high winds and hail *might* form. (p225)

恶劣天气 (惡劣天氣) ^{è liè tiān qì} **Severe weather** is weather that can cause damage. (p224)

雨雪 ^{yǔ xuě} **Sleet** is frozen raindrops that fall as precipitation. (p194)

小肠 (腸) ^{xiǎo cháng} **Small intestine** is a narrow winding tube where food is changed chemically and broken down into small particles that can be absorbed into the blood. (p138)

太阳能系统 (太陽能系統) **Solar system** is a system that includes the Sun and its planets, along with many moons, asteroids, and comets. (p257)

可溶性 **Solubility** is the amount of a substance that can be dissolved by a solvent at a certain temperature. (p28)

溶剂 (劑) **Solvent** is the substance in a solution in which that solute dissolves. (p28)

星, 恒星 **Star** is a huge ball of very hot gas that gives off energy. (p257)

静止锋 (鋒) **Stationary front** is the boundary between two air masses that does not move very much. (p257)

升华 (昇華) **Sublimation** is the process by which a solid changes directly into a gas. (p53)

T

电报 (電報) **Telegraph** is a machine that allows people to send messages long distances. (p234)

气温变化和缓 (氣溫變化和緩)** **Tempered** is describes air that is warmed in winter and cooled in summer because it is near a large body of water. (p230)

细胞组织 (細胞組織) **Tissue** is a group of the same kind of cells that work together to do a job. (p98)

龙卷风（龍捲風）^{lóng juǎn fēng} **Tornado** is a rotating column of air that extends from a thunderstorm to the ground. (p226)

气（氣）管^{qì guǎn} **Trachea** is the tube that carries air from the larynx to the lungs. (p132)

U

尿^{niào} **Urine** is the mix of waste and water taken out of the blood by the kidneys and stored in the bladder. (p140)

V

液泡^{yì pào} **Vacuole** is a part of a cell that stores water and nutrients. (p96)

瓣膜^{bàn mó} **Valve** is a part of the heart that opens and closes to make sure the blood flows in the right direction. (p130)

叶脉（葉脈），脉管（脈管）^{yè mò mǎo guǎn} **Vascular** is describes the system of tubes in certain plants that transports water and minerals. (p102)

静脉（靜脈）^{jìng mò} **Vein** is a blood vessel the carries blood toward the heart. (p128)

心室^{xīn shì} **Ventricle** is the lower part of each side of the heart. (p131)

小肠绒毛组织（小腸絨毛組織）^{xiǎo cháng róng máo zū zhī} **Villi** are the tiny finger-shaped structures that cover the walls of the small intestine. (p138)

W

nuǎn fēng qián 暖锋(鋒)前 **Warm front** is the boundary between two air masses where the warm air mass is moving into the area. (p220)

shuǐ xún huán 水循环(環) **Water cycle** is the repeated movement of water through the environment in different forms; also called the hydrologic cycle. (p188)

dì xià shuǐ wèi 地下水位 **Water table** is the top level of the groundwater in an aquifer. (p177)

shuǐ zhēng qì 水蒸气(氣) **Water vapor** is the gas form of water. (p188)

shuǐ qú 水渠 **Water shed** is the area from which water drains into a river. (p178)

zhòng liáng tǐ zhòng 重量, 体(體)重 **Weight** is a measure of the pull of gravity on an object. (p10)

fēng 风(風) **Wind** is convection currents in the atmosphere. (p215)

X

mù zhì bù 木质(質)部 **Xylem** is tubes that carry water and minerals from a plant's roots to its leaves. (p102)

dāng lěng nuǎn liǎng zhǒng bú tóng xìng zhì zhī qì tuán xiāng yù shí qí jiāo jiè miàn jí chēng wéi fēng miàn
*當冷暖兩種不同性質之氣團相遇時，其交界面即稱為鋒面，
ér fēng miàn tōng cháng zhāo lěng kōng qì fāng xiàng qīng xié dāng nuǎn kōng qì xiàng lěng kōng qì tuī yí shǐ qí
而鋒面通常朝冷空氣方向傾斜，當暖空氣向冷空氣推移，使其
jiāo jiè miàn fēng miàn tōng guò dì qū fā shēng nuǎn kōng qì qǔ dài lěng kōng qì xiàn xiàng shí cǐ fēng
交界面（鋒面）通過地區發生暖空氣取代冷空氣現象時，此鋒
miàn jí shì nuǎn fēng fǎn zhī ruò shì fā shēng lěng kōng qì qǔ dài nuǎn kōng qì shí jí shì lěng fēng
面即是暖鋒，反之，若是發生冷空氣取代暖空氣時即是冷鋒。
yóu yú nuǎn kōng qì jūn bǐ lěng kōng qì wèi qīng yīn cǐ yào nuǎn kōng qì qù tuī zǒu lěng kōng qì
由於暖空氣均比冷空氣為輕，因此要暖空氣去推走冷空氣，
bì xū yào yǒu jiǎo guǎng zhī shuǐ píng tuī dòng lì cái xíng tái wān wèi yú fù rè dài wěi dù jiào
必須要有較廣之水平推動力才行，台灣位於副熱帶，緯度較
dī kōng qì chuí zhí yùn dòng jiào pín fán wēn dù yì jiào zhōng wěi dù kōng qì wèi gāo nuǎn kōng qì
低，空氣垂直運動較頻繁，溫度亦較中緯度空氣為高，暖空氣
hěn róng yì jiù bèi jǔ shēng qǐ lái zài dì miàn shàng yào qǔ dài lěng kōng qì shí fēn kùn nán gù
很容易就被舉升起來，在地面上要取代冷空氣十分困難，故
jí shǎo yǒu nuǎn fēng xiàn xiàng fā shēng dàn zài zhōng wěi dù dì qū zhī dī qì yā xì tǒng zé cháng bàn suí
極少有暖鋒現象發生。但在中緯度地區之低氣壓系統則常伴隨
yǒu lěng fēng jí nuǎn fēng bìng cún de xiàn xiàng
有冷鋒及暖鋒並存的現象。

qì wēn biàn huà hé huǎn shì zhǐ kōng qì yīn wéi zài jù dà shuǐ tǐ fù jìn zào chéng kōng qì zài
**氣溫變化和緩是指空氣因為在巨大水體附近，造成空氣在
dōng tiān huì bèi jiā wēn qié zài xià tiān bèi lěng què
冬天會被加溫且在夏天被冷卻。

